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MHF LOGISTICAL SOLUTIONS
5800 WESTSIDE AVENUE — SOIL TRANSLOAD FACILITY

SITE LOCATION

FIGURE NO.

1

PROJECT NO. 070159 Figure 2

Hackensack Meadowlands District Zoning Map



ZONING MAP

PROJECT NO. 070159

DRAWINGS

APPENDIX A DOOR SPECIFICATIONS

5633



TNR" combines rugged durability with high performance drive systems.

These TNR* rubber roll-up door models are best suited for industrial and commercial applications with:

• harsh environments of dirt, dust, temperature, rain and snow • high pressure and windload

• door impact concerns • high traffic and continual process flow demands







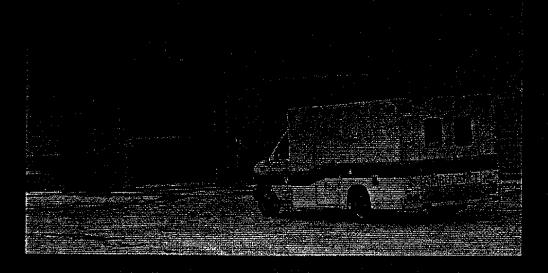
Performance



Size

Your fast pace and rugged workplace demands tough doors that give you peace of mind. In the most severe applications TNR* rubber roll-up doors deliver unmatched

durability and reliability. Year after year, receive trusted performance with maximum up-time and minimal maintenance. TNR's team gets you the door you need.



in Tourist Committee



HOT/HOS/HOC

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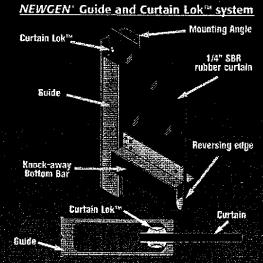
HDT: TRAFFIC HDS: SPEED HDG: CYCLING SPRINGLESS

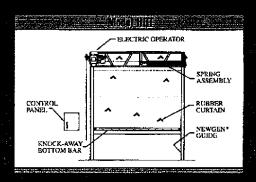
Rugged TNR* rubber roll-up doors that have get up and go performance. Peace of mind with maximum uptime in your fast pace, non-stop rugged workplace. Process and Maintenance Engineers recognize the value of TNR's proven indestructibility and endurance qualities combined with high speed performance. Repeat Customers are: manufacturing, food processing, automotive, bus transit stations, parking garages, postal, airports and railways.

Features

	-	S	3		-	.	c.
TNR* MECHANICAL COMPONENTS	er.	HDS					
 1/4" Black SBR rubber with polyester core weave. Flexible and resistant to abusive environments and impacts in temperatures from -40°F to +180°F. 				 Sleek profile with easy installation, reduced clearances & minimal maintenance. No hinges, cables, pulleys or tension springs. 	翻	#	
 Patented NEWGEN® guide and curtain lok™ system. Reliable and consistent door operation and impact release performance. No guide gap maintenance required. After an impact the door is up and running in minutes. 		AND		 Knock-away double angle steel bottom har 10 lb/ft with rubber loop and reversing edge 	2000 2000 2000 2000 2000 2000 2000 200	×	řã
				Self-supporting steel mounting angle.	20	灦	
 Windload and airflow pressure, standard building code pressure ratings of 88mph (20psf). 				• Frame mounted thru-beam photoelectric sensor.	翻	2	鑩
				• Options: colors, windows, hoods, traveling windbar for high windlead applications.			
TNR® BUILT TO YOUR NEEDS DRIVE SYSTEMS							
High Efficiency Helical Gear Head (HG) Operator with multi-function PLG panel,	癌	灩	200	• Counterbalance spring assembly cycle rating (,000).	190	100	
				 Springless with direct connect inertia brake mounted on the drive barrel shaft. 		77	na de la composição de
Soft Start Soft Stop using Inverter technology.		鸌					
High Range RPM motor.				Options: access controls and specialty functions.			
• Door Speed up to: - measured inches per second	38	60	30				
WARRANTY							
• 2-year warranty on parts and workmanship.	噩		W	• Limited lifetime warranty on curtain and NEWGEN* Guide	ž.		<u></u>









Toll free: 1-866-792-9968 Fax: 1-705-735-9564 info@tnrdoors.com

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Architectural Specifications*

TNR Industrial Doors

MODEL "HDT"



466 Welham Road Barrie, Ontario Canada, L4N 8Z4 Ph: 1-866-792-9968 Fax: 1-705-735-9564

<u>www.tnrdoors.com</u> email: info@tnrdoors.com

^{*} Please verify specifications. TNR Industrial Doors reserves the right to modify specifications any time without notice.

TNR Industrial Doors SPECIFICATIONS

Model "HDT"

PART 1 - General

Ref Master Format

1.1 SECTION INCLUDES:

- .01 Steel channel door frames and reinforcing steel. Section 05500.
- .02 Electrical power supply. Division 16, Electrical.

1.2 DESIGN CRITERIA

- .01 Rolling door curtain and assembly, in the down position, to withstand windloads of 88 mph (20 psf).
- .02 Rolling door to have NEWGEN® Guide and Curtain Lok™ system to provide a near airtight seal and knock-away feature for easy reassembly upon impact.
- .03 Rolling door SBR curtain for service temperature range of -40°F to +180°F (-40°C to +85°C).
- .04 Counterbalance springs to be outboard 100,000 cycle.

1.3 SAMPLES

.01 Submit shop drawing in accordance with Section 01340 [Division 1
 - General Requirements] - Shop Drawings, Product Data, Samples and Mock-Ups.

1.4 SHOP DRAWINGS

- .01 Submit shop drawing in accordance with Section 01340 [Division 1
 General Requirements] Shop Drawings, Product Data, Samples and Mock-Ups.
- .02 Indicate each type of door arrangement of hardware, required clearances, electrical characteristics including voltages, size of motors, auxiliary controls and wiring diagrams.
- .03 Indicate assembly details and dimensions of fabrication, required clearances and electrical connections.

1.5 MAINTENANCE DATA

- .01 Provide operation and maintenance data for the Model "HDT" door and hardware for incorporation into manual specified in Section 01730 [Division 1 - General Requirements] - Operation and Maintenance Manual.
- .02 Maintenance data shall include:
 - a complete description of operation in order of task
 - · wiring diagrams showing all electrical connections
 - a list of parts requiring replacement
 - a parts list with illustrations and identifications
 - identification numbers for each door

1.6 QUALITY ASSURANCE

.01 Installer with Factory-Approved qualifications.

PART 2 - PRODUCTS

2.1 MATERIALS

.01 The acceptable material for the roll-up door is to be as per the Model "HDT" Door System as manufactured by TNR Industrial Doors or approved equal. All approved equals must be submitted for approval ten (10) days prior to the closing date of this tender and must be approved in writing by addenda.

2.2 CURTAIN

- .01 Two (2) layers of Styrene Butadiene Rubber (SBR) each .8 mm (1/8") thick, 70 durometer; sandwiched with 1-ply, 50kg (110 lbs.) polyester cord centre. Material provides normal resiliency and flexibility at temperatures ranging from -40° F to +180°F (-40°C to +85°C)
- .02 Complete with molded NEWGEN® Curtain Loks™ that are mechanically attached to the vertical edges of the curtain material. This retention system maintains and holds the curtain in guides under extreme windload conditions. Continuous SBR windlock or molded-in place Teflon windlock designs will not be accepted.
- .03 Standard Color: Black Also available in blue or gray EPDM, Black nitrile, flame-retardant self-extinguishing black MSHA rated.

2.3 GUIDES

- Side curtain retention: NEWGEN® Guides shall be one-piece extruded aluminum to form a slot of sufficient depth to allow the NEWGEN® Curtain Lok™ to move freely in the guides at all times. Aluminum members are to be of sufficient thickness and rigidity to maintain the NEWGEN® Curtain Lok™ within the guides at pressures of up to 0.96 Kpa (20 psf), while enabling the NEWGEN® Curtain Lok™ to release during impacts that generate pressures beyond 0.96 Kpa (20 psf). Bolted or spring-loaded guides are not acceptable.
- .02 Side frame: Mounting steel angle is provided for installation directly onto concrete or steel door framing. Additional customization of door frame is not required.

2.4 BOTTOM RAIL

.01 Bottom bar shall extend the full width of the curtain, sufficient to maintain the bottom edge of the curtain parallel to the door threshold at all times. The bottom bar shall be constructed of two steel angles bolted together and shall have a knock-away section to reduce risk of damage during accidental impacts and provide ease of straightening, allowing for simple re-assembly.

2.5 ROLL-UP DOOR SYSTEM

- .01 The curtain is to be rolled on a barrel of sufficient size to carry the door load with a deflection of not more than 2.5 mm/m (.03" per foot) of opening width and is to be evenly balance by 100,000 cycle oil-tempered, helical outboard torsion springs. Both the drive barrel shafts are to be constructed of minimum 38mm (1 1/2") C1018 Cold Rolled steel shafts.
- .02 The Idler Barrel shall be constructed of 102mm (4") O.D. round H.S.S. structural tubing with a minimum wall thickness of 3.4mm (.134") and supported by 32mm (1 1/4") C1018 Cold Rolled steel shafts at either end. Idler must be guide mounted not end bracket mounted for proper tracking of curtain into NEWGEN® Guides.

2.5ROLL-UP DOOR SYSTEM (continued)

End brackets are constructed of 6mm (1/4") hot-rolled steel plate c/w sealed heavy-duty, self-aligning bearings with cast iron housings to support the drive barrel. Bearings shall be load-rated at 2540 kg (5600 lbs.) dynamic and 1524 kg (3360 lbs.) static.

Document 283-4

.04 Welded Truss shall brace endplates together at the top and bottom with C3 x 4.1 channel and 2" x 1/4" flatbar diagonal bracing.

2.6 REVERSING EDGE

.01 Equip door with reversing sensing edge to stop and reverse door to manufacturer's standard. A 1/8" thick EPDM rubber loop shall wrap the reversing edge. Both the reversing edge and rubber loop must be replaceable without removing the bottom bar from the curtain.

2.7 **ACCESSORIES**

Various accessories are available i.e.: radio controls, motion sensors, loop detectors, pull cords, traffic lights etc.

2.8 CONSTRUCTION

- .01 Doors: constructed of steel, aluminum and SBR rubber/woven curtain.
- .02 Structural elements: assembled by welding or by mechanical fasteners.

2.9 OPERATION OF DOOR

- Doors shall be equipped for operation by:
 - 1- electric operator
 - 2- manual chain hoist

2.10 MANUAL OPERATION

- .01 Emergency manual chain hoist shall be provided to allow manual door operation.
- Chain hoist shall be of sufficient capacity to operate a door at a .02 maximum pull requirement of 9 to 14 kg (20 to 30 lbs.). The static load on the hand chain to hold the door in any position must not exceed 5 kg (11 lbs.).

- .01 Electric door operators shall be CSA/UL approved, Model HG, heavy-duty gearhead type c/w pre-wired, number coded control cabinet as required, to manufacturer's standard. Panel enclosure to NEMA-4 rating.
- .02 Motor to be T.E.F.C., high-starting torque, flange & foot mount, hoist-type, operating through a parallel helical gear reducer mechanism. The gear reducer is mounted on a heavy-duty base of 5/16" steel.
- .03 Motor and sprocketing to be of capacity to open door at maximum speeds of up to 30" per second, depending on door size to manufacturer's standard, rated for X-HP power, "X" Voltage, "X"-phase, "X" Hz.
- .04 Operator shall be equipped with rotary screw-type limit switches to control open and close door positions as well as an electro mechanical brake system to stop and hold door in any position to manufacturer's standards.
- .05 Operator shall be equipped with built-in manual emergency chain hoist. Built-in electrical interlock shall prevent motor operation during use of manual chain hoist.
- .06 Control Panel:
 - Panel enclosure shall be NEMA-4 and wiring shall be completed by manufacturer and shall be UL listed. Drive system shall be controlled by programmable logic controller (PLC). Optional custom designed control system and/or components are available. Control panel shall have adjustable closing timer, three push buttons for open, close and stop functions and a cycle counter.

PART 3 - EXECUTION

3.1 INSTALLATION

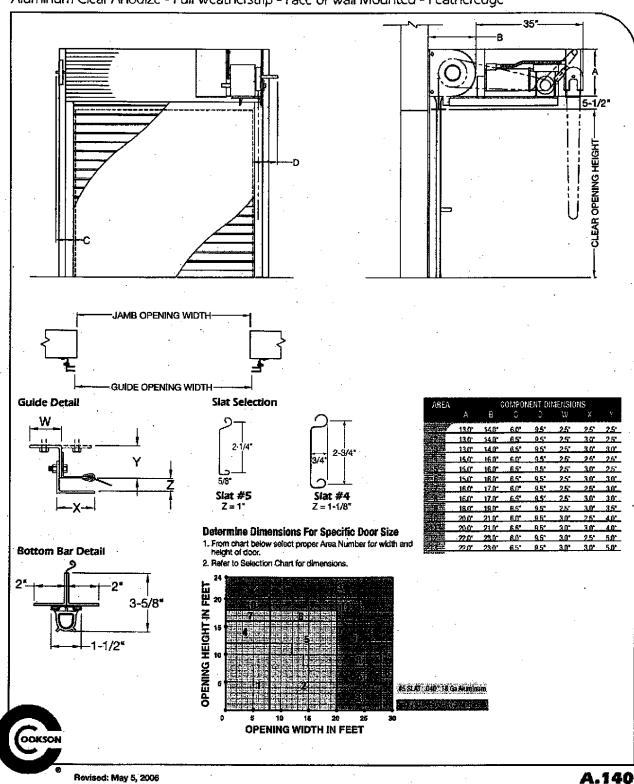
- .01 Install doors in accordance with manufacturer's printed instructions.
- .02 Install electrical motors, controller units, push-button stations and other electrical equipment required for door operation.
- .03 All electrical wiring including power supply, control and interface located near the door to be installed by an electrical contractor (to be put into electrical contractor's specification).
- .04 Upon completion of the door and electrical installation, the door installer must make necessary adjustments to the door to ensure smooth operation.

HERET TO DESCRIBE OF A COVERNMENT OF THE CONTROL OF

The Cookson Company

Type FCM - Motor (Gearhead - Horizontal) Operated Service Door

Aluminum Clear Anodize - Full Weatherstrip - Face of Wall Mounted - Featheredge



Type FCM - Motor (Gearhead - Horizontal) Operated Service Door

Aluminum Clear Anodize - Full Weatherstrip - Face of Wall Mounted - Featheredge

1.0 GENERAL

1.1 Summary

A. All Rolling Service Doors shall be as manufactured by The Cookson Company, Phoenix, Arizona. Furnished materials shall include all curtains, bottom bars, guides, brackets, hoods, operating mechanisms and any special features.

B. Work not to be included by The Cookson Company includes design of, material for, and preparation of door openings but not limited to structural or miscellaneous iron work, access panels, finish painting, electrical wiring, conduit and disconnect switches.

1.2 Quality Assurance

A. Exterior rolling service doors shall be designed to withstand at least a twenty (20) pounds per square foot windload. Windlocks shall be installed on .040 (18 gauge) doors over 8'1" wide and on .050 (16 gauge) doors over 12'1" wide.

B. All rolling service doors shall be designed to a standard maximum of 25 cycles per day and an overall maximum of 50,000 operating cycles for the life of the door.

2.0 PRODUCTS

2.1 Materials

A The door curtain shall be constructed of interconnected strip aluminum slats. The proper thickness of aluminum shall be chosen as follows:

 .040 (18 Gauge) thickness with a No. 5 (measuring 2-1/4" high by 5/8" deep) flat slat as designated by The Cookson Company if the door width does not exceed 24'4" and the door height does not exceed 24'4".

 .050 (16 Gauge) thickness with a No. 4 (measuring 2-3/4" high by 3/4" deep) flat slat as designated by The Cookson Company if the door width or height exceeds 24'4".

 The finish on the door curtain shall be 204-R1 clear anodized finish

C. The bottom bar shall consist of two 3/16" aluminum angles mechanically joined together and shall include the Cookson Featheredge safety edge system. The finish on the bottom bar shall be 204-R1 clear anodized finish.

D. The guides shall consist of 2 aluminum angles and 1 steel wall angle bolted together with 3/8" fasteners to form a channel for the curtain to travel and shall include an extruded vinyl snapon weatherstripping continuously along the exterior leg of the guide. The steel wall angle portion shall be continuous and fastened to the surrounding structure with minimum 1/2" fasteners on 36" centers. The finish on the aluminum angles shall be 204-R1 clear anodizedj finish. The finish on the steel wall angle shall be aluminum prime paint to match the aluminum angles.

E. The brackets shall be constructed of steel not less than 1/4" thick and shall be bolted to the wall angle with minimum 1/2" fasteners. The finish on the brackets shall be one (1) coat of

aluminum prime paint.

F. The barrel shall be steel tubing of not less than 4" in diameter. Oil tempered torsion springs shall be capable of correctly counter balancing the weight of the curtain. The barrel shall be designed to limit the maximum deflection to .03" per foot of opening width. The springs shall be adjusted by means of an exterior wheel. The finish on the barrel shall be one (1) coat of bronze rust-inhibiting prime paint.

G. The hood shall be fabricated from .040 aluminum and shall be formed to fit the curvature of the brackets. The hood shall contain a waterproof baffle to control air infiltration. The finish on the hood shall be 204-R1 clear anodizedfinish.

2.2 Operation

- A. The door shall be operated at a speed of 2/3 foot per second by an open drip-proof electric motor with gear reducer in oil bath. The motor operator shall include a geared limit switch, and an electrically interlocked emergency chain operator. The motor starter shall be housed in a NEMA 1 housing and include a magnetic reversing starter size 0, a 24 volt control transformer, and complete terminal strip to facilitate field wiring. The motor operator shall be activated by [a 3 button push-button station] [other controls as selected] in a NEMA 1 enclosure. The motor shall be size as required by the door [115 volts single phase] [230 volts three phase] [460 volts three phase]. The motor operator shall be mounted to the door bracket as shown on drawings. All motor operators shall be U.L. listed.
- 3. The service door shall include the Featheredge rolling door safety edge system as manufactured by The Cookson Company and shall include the following features:

 The Featheredge shall be installed on the bottom bar of the door and shall automatically reverse the door if the device detects an obstruction in the downward travel of the door.

2. The Featheredge shall consist of a rubber boot attached below the bottom bar with an electrical switch secured to the back of the bottom bar. The Featheredge shall operate with air wave technology and shall not rely on pneumatic pressure or electrical strip contacts to operate properly. The Featheredge shall create an air wave that shall be detected and reverse the direction of the rolling door.

The operation of the Featheredge shall not be subject to interferences by temperature, barometric pressure, water infiltration, or cuts in the rubber boot.

 The Featheredge shall be connected to the motor operator with a coil cord.

3.0 EXECUTION

3.1 Installation

 A. All Cookson Rolling Service Doors shall be installed by an authorized Cookson Distributor.

3.2 Warranty

A. All Cookson Rolling Service Doors shall be warranted for a period of 2 years from the time of shipment against defects in workmanship and materials.

APPENDIX B AIR HANDLING SYSTEM SPECIFICATIONS

RICHMOND TECH-AIR CORPORATION

188 Breakneck Road - Highland Lakes, New Jersey 07422 Tel. #973-764-0121 - Fax #973-764-0133 E-Mail RTA002@aol.com

August 24, 2007

Cornerstone Environmental Group, LLC 78 Cypress Road, Suite 5 Goshen, New York 10924

Attention:

Mr. Andrew Schellberg

Subject:

MHF Logistical Solutions, Inc. - North Bergen, NJ

Engineering Study for Dust & Odor Control System

Gentlemen:

This letter presents our recommendation for the design of an air management system to complement the proposed modifications to the MHF Logistical Solutions, Inc., transload facility located at 5800 West Side Avenue in North Bergen, New Jersey ("Facility").

On Wednesday, July 25, 2007, we visited the Facility, for the purpose of reviewing and evaluating the Facility's transloading operations as well as obtaining information to evaluate and support the design and installation of an appropriate air management system corresponding to the proposed Facility modifications. Our photographic documentation of our site visit is attached to this report.

For the purposes of our calculations, we considered that the Facility may be engaged to provide for transloading and disposal of certain soil materials that may be contaminated with hazardous constituents. In addition to our site visit, interviews with a wide range of Facility personnel and review of shipment records, we have evaluated the Existing Conditions Plan, Sheets 1 and 2, dated August 29, 2007.

Under this scope of work, Richmond Tech-Air Corporation has designed an air management system that consists of an inlet hood to be located over the transload hopper, an air filter bank consisting of a series of filters, an air handling unit capable of achieving the design air flow for the facility, and a collected dust removal system. The design specifications are now fully contained in the Proposed Transload facility Modification Floor Plans (Sheet 3) and Elevations (Sheet 4), prepared for MHF Logistical Solutions, Inc., by Cornerstone Environmental Group, LLC, dated August 29, 2007. We have reviewed and approved those design diagrams and specifications contained therein.

During the design phase, we determined that the control equipment for both applications, as noted below, is identical. In addition to the dust filtering components, multiple carbon filter arrangements were evaluated. The final design incorporates a General Carbon Corporation unit which was selected on the basis of the reputation of the manufacturer, the design specifications of the mechanism (including functionality, size and performance) and other features when assessed against comparable mechanisms. Additionally, as an added benefit, General Carbon Corporation is a New Jersey company and offers service and assistance in a tight timeframe along with enhanced service features such as carbon-life testing and carbon panel change-out.

Our recommended equipment selection is as follows:

- 1. Contaminated soils (See Figure 1) the control equipment for this application will include the following equipment train:
 - a. AAF Optiflo Cartridge Dust Collector, Model 4RC48, capable of handling 24,000 cfm. The collected dust will be returned to the rail car.
 - b. AAF HEPA Filter Section, with 12 HEPA filters, 24" x 24" x 12" deep, 99.97% efficiency on the 0.3 micron particles.
 - c. Two Carbon Adsorption Sections, manufactured by General Carbon Corp., each contains (96) Trays, 24" x 24" x 2" thick filled with virgin activated carbon, for a total in both banks of (192) Trays.
 - d. One bank of after filters for prevention of dusting, containing 12 Perfect Pleat, After filters, 30% efficiency, 24" x 24" x 2".
- 2. Low-level Radioactive Contaminated Soils (See Figure 2) the control equipment for this application will include the following equipment train:
 - a. AAF Optiflo Cartridge Dust Collector, Model 4RC48, capable of handling 24,000 cfm. The collected dust will be returned to the rail car.
 - b. AAF HEPA Filter Section, with 12 HEPA filters, 24" x 24" x 12" deep, 99.97% efficiency on the 0.3 micron particles.
 - c. Two Carbon Adsorption Sections, manufactured by General Carbon Corp., each contains (96) Trays, 24" x 24" x 2" thick filled with virgin activated carbon, for a total in both banks of (192) Trays.
 - d. One bank of after filters for prevention of dusting, containing 12 Perfect Pleat, After filters, 30% efficiency, 24" x 24" x 2".

Brochures describing the above-referenced equipment are attached. As noted above, our recommended design specifications are reflected in the Proposed Transload facility Modification Floor Plans (Sheet 3) and Elevations (Sheet 4), prepared for MHF Logistical Solutions, Inc., by Cornerstone Environmental Group, LLC, dated August 29, 2007.

We trust the attached data will assist you with the evaluation of this project. If you need additional information please let us know.

Yours truly,

Richmond Tech-Air Corp.

By: A. Oiestad

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SITE PHOTOS

